## Index of Documents for RCRA Docket # F-98-2P4F-FFFFF

Land Disposal Restrictions Phase IV: Final Rule Promulgating Treatment Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters

- 1. Response to Comments Document. Volume 1: Comments Related to Phase III Proposed Rule (March 2, 1995). Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 2. Response to Comments Document. Volume 2: Comments Related to Phase IV Proposed Rule (August 22, 1995). Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 3. Response to Comments Document. Volume 3: Comments Related to First Supplemental Proposed Rule (January 25, 1996). Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 4. Response to Comments Document. Volume 4: Comments Related to First Notice of Data Availability (May 10, 1996). Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 5. Response to Comments Document. Volume 5: Comments Related to Second Notice of Data Availability (March 5, 1997). Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).

- 6. Response to Comments Document. Volume 6: Comments Related to Second
  Supplemental Proposed Rule (May 12, 1997). Land Disposal Restrictions--Phase IV:
  Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing
  Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment
  Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving
  Wastewaters. (April 30, 1998).
- 7. Response to Comments Document. Volume 7: Comments Related to Treatment Standards for Contaminated Soils. Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 8. Response to Comments Document. Volume 8: Comments Related to Regulatory Impact
  Analysis for Newly-Identified Mineral Processing Waste Issues Raised in First
  Supplemental Proposed Rule (January 25, 1996). Land Disposal Restrictions--Phase IV:
  Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing
  Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment
  Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving
  Wastewaters. (April 30, 1998).
- 9. Response to Comments Document. Volume 9: Comments Related to Regulatory Impact Analysis for Newly-Identified Mineral Processing Waste Issues Raised in Second Supplemental Proposed Rule (May 12, 1997). Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 10. Response to Comments Document. Volume 10: Comments Related to Regulatory Impact Analysis for TC-Metal Hazardous Waste Issues Raised in Original Proposed Rule (August 22, 1995) and in Second Supplemental Proposed Rule (May 12, 1997). Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 11. Response to Comments Document. Volume 11: Comments Related to Newly-Identified Mineral Processing Waste Treatment Standards; Grab Versus Composite Sampling; Radioactive Mixed TC-Metal Wastes; and Sulfide Waste Issues. Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill

- Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 12. Response to Comments Document. Volume 12: Comments Related to Capacity Analysis for Newly-Identified Toxicity Characteristic Metal Wastes and Mineral Processing Wastes. Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatment Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 13. Response to Comments Document. Volume 13: Comments Related to First Supplemental Proposed Rule (January 25, 1996): Clarification of Bevill Exclusion for Mining Wastes, Changes to the Definition of Solid Waste for Mineral Processing Wastes, Treatment Standards for Characteristic Mineral Processing Wastes, and Associated Issues. Land Disposal Restrictions--Phase IV: Final Rule Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes; Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving Wastewaters. (April 30, 1998).
- 14. Response to Comments Document. Volume 14: Comments Related to Second
  Supplemental Proposed Rule (May 12, 1997): Treatment Standards for Metal Wastes and
  Mineral Processing Wastes, Mineral Processing and Bevill Exclusion Issues, and the Use
  of Hazardous Waste as Fill. Land Disposal Restrictions--Phase IV: Final Rule
  Promulgating Treatments Standards for Metal Wastes and Mineral Processing Wastes;
  Mineral Processing Secondary Materials and Bevill Exclusion Issues; Treatment
  Standards for Hazardous Soils; and Exclusion of Recycled Wood Preserving
  Wastewaters. (April 30, 1998).
- 15. Technical Background Document. <u>Human Health and Environmental Damages from Mining and Mineral Processing Wastes</u>. USEPA (April 1998).
- 16. *Technical Background Document*. <u>Identification and Description of Mineral Processing Sectors and Waste Streams</u>. USEPA (April 1998).
- 17. Note to RCRA Docket #F-98-2P4F-FFFFF on the Status of the Technical Background Document. Lightweight Aggregate Kiln Dust and Air Pollution Control Wastes. Ashley Allen, USEPA (April 27, 1998).
- 18. Technical Background Document. Mineral Processing Facilities Placing Mixtures of Exempt and Non-Exempt Wastes in On-Site Waste Management Units. USEPA (April 1998).
- 19. Technical Background Document. Remanded Smelting Wastes. USEPA (April 1998).

- 20. *Technical Background Document*. <u>Site Visit Reports to Mines and Mineral Processing Facilities</u>. USEPA (April 1998).
- 21. *Technical Background Document*. <u>Applicability of the Toxicity Characteristic Leaching Procedure to Mineral Processing Wastes</u>. USEPA (April 1998).
- 22. *Technical Background Document*. <u>Titanium Tetrachloride Production by the Chloride Ilmenite Process</u>. USEPA (April 1998).
- 23. Technical Background Document. <u>Damage Cases and Environmental Releases from Mines and Mineral Processing Sites.</u> USEPA (April 1998).
- 24. *Technical Background Document*. <u>CERCLA Imminent Hazard Mining and Mineral Processing Facilities</u>. USEPA (April 1998).
- 25. *Technical Background Document*. <u>Characterization of Mineral Processing Wastes and Materials</u>. USEPA (April 1998).
- 26. *Technical Background Document*. <u>Costs of Remediation at Mine Sites</u>. USEPA (April 1998).
- Technical Background Document. Nevada Gold Cyanide Mill Tailings Regulation: A
   Comparison of State Design and Operating Standards to the Uranium Mill Tailings
   Standards. USEPA (April 1998).
- 28. *Technical Background Document*. <u>Feasibility Analysis: A Comparison of</u>
  Phosphogypsum and Uranium Mill Tailing Waste Unit Designs. USEPA (April 1998).
- 29. *Technical Background Document*. <u>Availability of Natural Resource Damage Assessment Modeling</u>. USEPA (April 1998).
- 30. *Technical Background Document*. <u>Population Studies of Mines and Mineral Processing Sites</u>. USEPA (April 1998).
- 31. *Technical Background Document*. Mining and Mineral Processing Sites on the NPL. USEPA (April 1998).
- 32. Technical Background Document. Risks Posed by Bevill Wastes. USEPA (April 1998).
- 33. *Technical Background Document*. Non-RCRA Tanks, Containers and Buildings. USEPA (April 1998).

- 34. *Technical Background Document*. The Feasibility of Lining Tailings Ponds. USEPA (April 1998).
- 35. Note to RCRA Docket #F-98-2P4F-FFFFF on the Status of the Technical Background Document. Technical Report on Naturally Occurring Radioactive Materials in the Southwestern Copper Belt of Arizona. Ashley Allen, USEPA (April 1998).
- 36. *Technical Background Document*. Report to Congress on Special Wastes from Mineral Processing. Office of Solid Waste, USEPA (1990).
- 37. Technical Background Document. Reengineering RCRA for Recycling; Definition of Solid Waste Task Force: Report and Recommendations. Office of Solid Waste, USEPA (1994).
- 38. *Memorandum to Phase 4 Administrative Record.* Re: Solid Waste Definition Task Force Report. Steven Silverman, Attorney, USEPA (April 28, 1998).
- 39. *Note to RCRA Docket #F-98-2P4F-FFFFF*. <u>Teleconference with Western Governors Association (WGA)</u>. Ashley Allen, USEPA (November 24, 1997).
- 40. *Note to RCRA Docket #F-98-2P4F-FFFFF.* Meeting with National Mining Association (NMA). Ashley Allen, USEPA (November 21, 1997).
- 41. *Note to RCRA Docket #F-98-2P4F-FFFF.* Teleconferences with National Mining Association (NMA). Ashley Allen, USEPA (January 14, 1998 and January 26, 1998).
- 42. *Note to RCRA Docket #F-98-2P4F-FFFFF.* Meetings with National Mining Association (NMA). Ashley Allen, USEPA (Winter 1994 and Spring 1995).
- 43. Technical Background Document. Background Document for Capacity Analysis for Land Disposal Restrictions Phase IV: Newly Identified Toxicity Characteristics Metal Wastes and Mineral Processing Wastes (Final Rule). ICF Kaiser (April 1998).
- 44. Technical Background Document. Background Document for Analysis of the Land Disposal Restrictions Phase IV: Underground Injection Data and Issues. ICF Kaiser (April 1998).
- 45. *Technical Background Document*. <u>Background Documents Supporting the Phase IV</u> <u>Final Rule: Metal Treatment Standards</u>. Elaine Eby, USEPA (April 1998).
- 46. *Technical Background Document*. <u>Site-Wide Soils Remedy Report</u>. Dames & Moore (March 1996).

- 47. *Technical Background Document*. <u>Soil Treatment Analysis: Analysis of Treatability Data for Contaminated Soil Treatment Technologies</u>. USEPA (April 1998).
- 48. Correspondence to HWIR-Media Docket #F-96-MHWP-FFFFF from Elizabeth McManus, USEPA. Re: Meeting with Representatives of Hansen North America. (November 24, 1997).
- 49. Correspondence and Attachment to Elizabeth McManus, USEPA from Robert S. Markwell, Beazer East, Inc. Re: Land Disposal Restrictions, Phase IV Appeal. (March 13, 1998).
- 50. Correspondence to Elizabeth McManus, USEPA from Dean A. Calland, Attorney, Babst, Calland, Clements & Zomnir. Re: Land Disposal Restrictions, Phase IV Appeal. (December 24, 1997).
- 51. Memorandum to File from Ginevera Moore, Assistant Regional Counsel and John DeLashmit, RCRA Compliance Officer. Re: Listed Waste Issues. USEPA (November 18, 1993).
- 52. Correspondence to Tye Perry, Polaroid Corporation from John A. Carrigan,
  Massachusetts Department of Environmental Protection. Re: Application of the
  "Contained-In" Policy to the Management of Contaminated Soils Generated at Locations
  within Massachusetts. (February 11, 1998).
- 53. Memorandum to Administrative Record for Phase 4 Rule/ Hazardous Soils/ F-98-2P4F-FFFFF from Jose' E. Labiosa and Rita Chow, USEPA. Re: Derivation of Treatment Achievability Results for Organic Functional Groups and Types of Compounds. (March 26, 1998).
- 54. Technical Background Document. <u>Technology Screening Guide for Treatment of CERCLA Soils and Sludges</u>. Office of Emergency and Remedial Response, USEPA (September 1988).
- 55. Memorandum to Administrative Record for Phase 4 Rule/ Hazardous Soils/ F-98-2P4F-FFFFF from Jose' E. Labiosa, USEPA. Re: Extrapolation of Treatment Performance

  Data in the Soil Data Base Among Hazardous Constituents in Contaminated Soils and

  Other Implementation. (April 30, 1998).
- 56. Memorandum to Administrative Record for Phase 4 Rule/ Hazardous Soils/ F-98-2P4F-FFFFF from Jose' E. Labiosa and Rita Chow, USEPA. Re: Supporting Documents for Preamble Discussion on the Achievability of Contaminated Soil Treatment Standards. (April 30, 1998).

- 57. *Memorandum to Docket #F-98-2P4F-FFFF from Jose´E. Labiosa and Rita Chow, USEPA*. Re: Additional Information on Treatability of Contaminated Soils as Discussed in Section VII.B.8. of Phase IV Final Rule Preamble. (April 30, 1998).
- 58. Technical Background Document. <u>Application of the Phase IV Land Disposal</u>
  Restrictions to Contaminated Media: Costs, Cost Savings, and Economic Impacts. ICF
  Incorporated (April 3, 1998).
- 59. *Technical Background Document*. <u>Treatability Analysis of Completed Demonstration Projects</u> (1995 EPA SITE Program). Subijoy Dutta, P.E. USEPA (August 11, 1997).
- 60. Technical Background Document. <u>CRC Handbook of Chemistry and Physics: A Ready-Reference Book of Chemical and Physical Data</u>, 75th Edition, CRC Press 1994, pp.4-35 to 4-114 (Table of *Physical Constants of Inorganic Compounds*).
- 61. Technical Background Document. Summary Table: Effect of the Revised Solid Waste Definition on Whether Reclaimed Sludges and By-Products are Solid Wastes, Item No. 6 (S0006) from RCRA Docket #F-87-SWRP-FFFFF, USEPA (December 18, 1987).
- 62. *Note to RCRA Docket #F-98-2P4F-FFFFF* on Status of the Memorandum to Steve Hoffman, EPA, from Maravene Edelstein, Jen Mayer, and Peter Soyka, ICF Incorporated on the Leaching Potential of Organic and Inorganic Acids, from Ashley L. Allen, USEPA (April 28, 1998).